

#### **ABSTRACT OF DISCLOSURE**

An equalizer for a single-carrier receiver having an enhanced convergence speed and a steady equalization performance. A filter unit filters received multi-path signals. A field synch extractor extracts a field synch signal having two signals of different levels from the received signals and a field synch storage unit stores a kth field synch signal of the extracted field synch signal. An error calculator N times repeatedly uses the kth field synch signal and calculates equalization error values, wherein the filter unit uses the equalization error values to update coefficients of the filters. Accordingly, the equalizer N times repeats the kth field synch signal to be compared to a reference signal generated from the field synch generator, so as to be operated in a training mode, to thereby enhance the convergence speed of the equalizer.